

### **REMARKS**

The application has been reviewed in light of the Office Action mailed on December 24, 2008. Claims 1-25 remain in the present application, with claims 1, 7, 14 and 19 being in independent form. Claims 1, 3, 7, 9, 14 and 19 have been amended in the present Amendment. It is respectfully submitted that the amendments are fully supported by the specification as originally filed and introduce no new subject matter, and the pending claims 1-25 are in condition for allowance.

#### **Double Patenting Rejections**

Claims 1-5, 7-12, 14-17, 19-23, and 24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4, 10-12, 14-15, and 17-19 of U.S. Patent No. 6,627,020 in view of HERRON et. al. (US 4,753,694). Included with this response is a terminal disclaimer which should obviate the double patenting rejection.

Accordingly, Applicants respectfully request that the rejections of these claims on the ground of nonstatutory double patenting be withdrawn.

#### **Rejection of Claims under 35 U.S.C. § 102**

Claims 1-4, 7-11, 14-16, 19-22, and 25 are rejected under 35 U.S.C. § 102(a) as being anticipated by LEE et. al. (US 2003/0168150) (hereinafter "LEE").

With respect to independent claims 1 and 7, the claimed invention includes, *inter alia*, the step of "providing at least one personalized ceramic greensheet having a local peripheral kerf area and an external peripheral kerf area." In Applicants' invention, the local peripheral kerf area and the external peripheral kerf area are two different and separate areas on the ceramic

greensheet. The external peripheral kerf area will be green sized away before sintering the ceramic substrate, while the local peripheral kerf area will not be sized away until after sintering the ceramic structure. To make it more clear, a limitation that “wherein said external peripheral kerf area will be green sized away before sintering said multilayer ceramic substrate and said local peripheral kerf area will be separated away from said multilayer ceramic substrate after sintering said multilayer ceramic substrate” is added to independent claims 1 and 7. Support for such amendments can be found in Paragraph 62 of Applicants’ application.

LEE does not teach this feature. Nowhere in LEE mentions that the dielectric layer has a local peripheral kerf area and an external peripheral kerf area which are different and separate and that the external peripheral kerf area will be green sized away before sintering the multilayer ceramic substrate and the local peripheral kerf area will be separated away after sintering the multilayer ceramic substrate. Therefore, LEE does not anticipate independent claims 1 and 7. Accordingly, Applicants respectfully request that the rejection of claims 1 and 7 under 35 U.S.C. § 102(a) be withdrawn.

Claims 2 and 8 depend directly from independent claims 1 and 7 respectively and are therefore patentable over LEE for at least the reason given above for independent claims 1 and 7. In addition, claims 2 and 8 further include the step of “post sinter sizing said multilayer ceramic substrate thereby separating said at least one first continuous non-densifying structure from said multilayer ceramic substrate” and the step of “post sinter sizing said multi-up multilayer ceramic substrate to form individual multilayer ceramic substrates and thereby separating said at least one first continuous non-densifying structure from said individual multilayer ceramic substrates” respectively. These steps emphasize that the first continuous non-densifying structure is separated from the ceramic substrate when the ceramic substrate is post sinter sized. In other

words, the separation occurs during the post sinter sizing of the ceramic substrate. Nowhere in LEE teaches this additional feature of claims 2 and 8. Therefore, LEE does not anticipate claims 2 and 8. Accordingly, Applicants respectfully request that the rejection of claims 2 and 8 under 35 U.S.C. § 102(a) be withdrawn.

Claims 3 and 9 also depend directly from independent claims 1 and 7 respectively and are therefore patentable over LEE for at least the reason given above for independent claims 1 and 7. In addition, claims 3 and 9 further include, *inter alia*, the steps of “placing said at least one second continuous non-densifying structure on the external peripheral kerf area of said at least one personalized ceramic greensheet prior to lamination wherein said at least one second continuous non-densifying structure will at least partially control the dimensions of said (multi-up) green ceramic laminate during lamination” and “*pre-sinter sizing* said (multi-up) green ceramic laminate thereby separating said at least one second continuous non-densifying structure from said (multi-up) green ceramic laminate *prior to sintering.*” (emphasis added)

LEE does not disclose the step of “placing said at least one second continuous non-densifying structure on the external peripheral kerf area of said at least one personalized ceramic greensheet prior to lamination wherein said at least one second continuous non-densifying structure will at least partially control the dimensions of said (multi-up) green ceramic laminate during lamination.” As discussed above, LEE does not even mention that the dielectric layer has a local peripheral kerf area and an external peripheral kerf area which are different and separate. More importantly, in Applicants’ claimed invention, the at least one second continuous non-densifying structure is separated from the green ceramic laminate *before* sintering. LEE merely mentions that the constrain layer needs not be removed *after* firing. Even assuming *arguendo* that this implies that the constraint layer may be removed after firing, as the Examiner asserts,

nowhere in LEE teaches that the constrain layer may be removed *before* sintering. Therefore, LEE cannot anticipate claims 3 and 9. Accordingly, Applicants respectfully request that the rejection of claims 3 and 9 under 35 U.S.C. § 102(a) be withdrawn.

Claims 4 and 11 depend directly from claims 3 and 9 respectively and are therefore patentable for at least the reasons given above for claims 3 and 9. Accordingly, Applicants respectfully request that the rejection of claims 4 and 11 under 35 U.S.C. § 102(a) be withdrawn.

Claim 10 depend directly from claim 7 and is patentable for at least the reasons given above for claim 7. Accordingly, Applicants respectfully request that the rejection of claim 10 under 35 U.S.C. § 102(a) be withdrawn.

The amended independent claims 14 and 19 include, *inter alia*, “at least one personalized ceramic greensheet having a local peripheral kerf area and an external peripheral kerf area, wherein said external peripheral kerf area will be green sized away before sintering said multilayer ceramic laminate structure and said local peripheral kerf area will be separated away from said multilayer ceramic laminate structure after sintering said multilayer ceramic laminate structure” and “at least one personalized ceramic greensheet having a plurality of product samples separated by a local kerf area and having peripheral external kerf area, wherein said external peripheral kerf area will be green sized away before sintering said multi-up multilayer ceramic laminate structure and said local peripheral kerf area will be separated away from said multi-up multilayer ceramic laminate structure after sintering said multi-up multilayer ceramic laminate structure” respectively. As discussed above, LEE does not disclose that the dielectric layer has a local peripheral kerf area and an external peripheral kerf area which are different and separate and that the external peripheral kerf area will be green sized away before sintering the ceramic laminate structure and the local peripheral kerf area will be separated away after

sintering the multilayer ceramic substrate. Therefore, LEE does not anticipate independent claims 14 and 19. Accordingly, Applicants respectfully request that the rejection of claims 14 and 19 under 35 U.S.C. § 102(a) be withdrawn.

Claims 15-17 and 20-23, 25 depend directly or indirectly from independent claims 14 and 19 respectively and are therefore patentable for at least the reasons given above for independent claims 14 and 19. Accordingly, Applicants respectfully request that the rejection of claims 15-17 and 20-23, 25 under 35 U.S.C. § 102(a) be withdrawn.

#### **Allowable Subject Matter**

Applicants acknowledge with appreciation that claims 6, 13, 18 and 24 have been found to be allowable if rewritten in independent form.

### **Conclusion**

In view of the foregoing amendments and remarks, Applicants respectfully submit that all claims pending in this application, namely claims 1-25, are now in condition for allowance. Accordingly, early and favorable consideration of this application is respectfully requested. Should the Examiner believe that a telephone or personal interview may facilitate resolution of any remaining matters, the Examiner is respectfully requested to contact Applicants' undersigned representative at the telephone number indicated below.

No fee is believed to be due for this submission. If any fees are required, however, the Commissioner is hereby authorized to charge such fees to Deposit Account No. 09-0458.

Respectfully Submitted,

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